Appendix I: Jiffy Reefing – two more systems

A Very Nice Set-up

Reefing the Netherlands way, as demonstrated by Ton Jaspers, is efficient and well thought out. The following photos are of Ton's W10445 *Swiebertje.*

Fig. 1: Shown is *Swiebertje's* single 'deep' reef main combined with a Bartels genoa reefing system. Ton, an avid racer as well as cruiser, is pleased with this arrangement. Note the two intermediate reefing points, plus an additional tie which he has added near the mast.

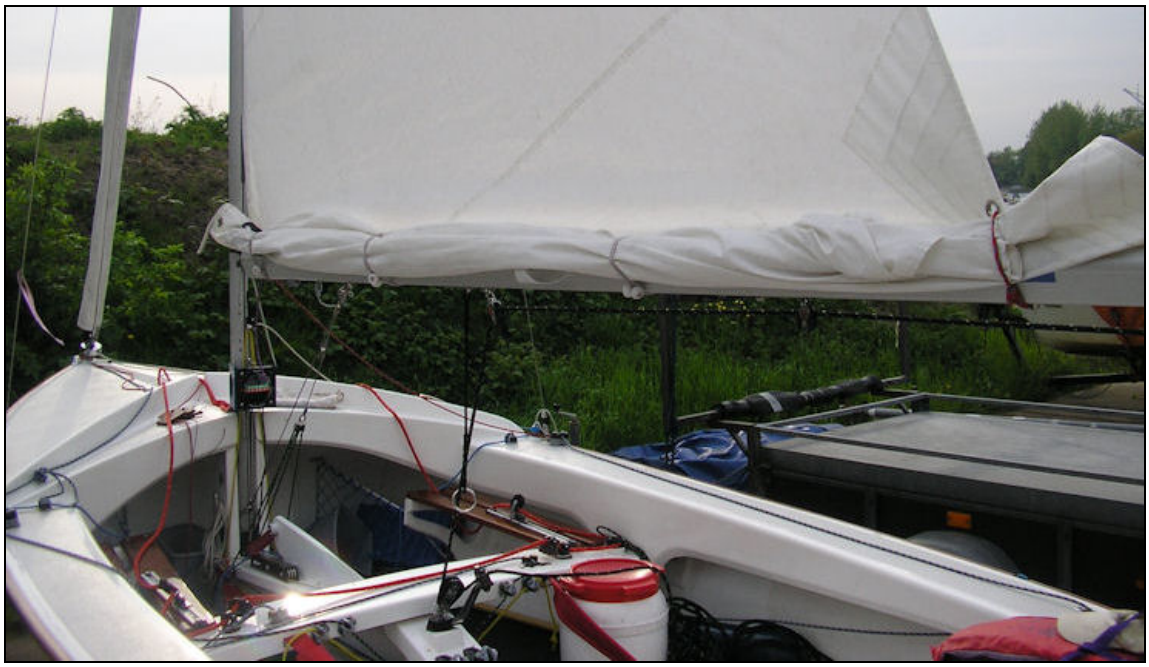

Fig. 2: The mainsail with the reef taken in. Note the intermediate quick ties using bungees with balls. The added tie next to the mast keeps the luff of the sail from drooping.

Fig. 3: Reefing clew, starboard side. The bullet block is needed because the running part of the reefing line leads to the end of the boom *(see fig. 4)*. Note this is a late-model type boom which is more angular in cross section. It has substantially more internal space and is stiffer than older generation circular booms, many of which are still seen in the US and Canada.

Fig. 4: Here is a good view showing the cross section of this boom. An optional feature is the double block end fitting. The red line is the reefing line. Similar to how the British do it, the line runs inside the boom and exits near the mast. It is interesting to note that Ton says the outhaul (purple/pink line) has a 4:1 purchase, which seems like a lot.

Fig. 5: Reefing clew, port side. Ton points out that it is better to have the bitter end of the reefing line tied on the bottom of the boom in order to allow enough room for gathering the sail. Adjustable slides which fit into a track on the bottom of the boom can be obtained from the manufacturer, but are pricy. So instead Ton used an inexpensive deck clip (eye strap?) riveted inside the track.

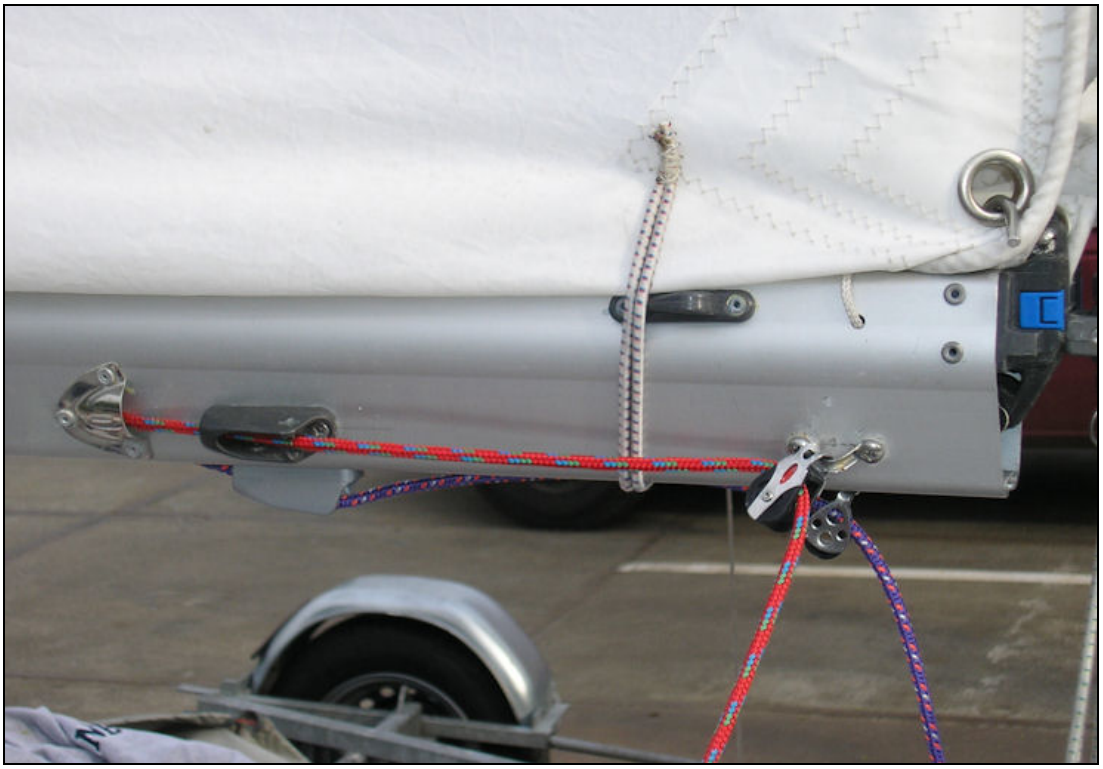

Fig. 6: Here *Swiebertje's* reefing line exits the boom close to the mast. The clam cleat is right there for locking the line - a very neat arrangement. Also, note the reefing hook for capturing the new tack grommet, as well as the added bungee quick tie. This has been sewn onto the sail because there is no grommet at this location, but it is within the area of the reinforcement.

Fig. 7: A popular school of thought preaches taking up most of the way on the reefing line, raising the end of the boom before beginning to lower the sail. This is a safeguard against accidently hitting the helm's head with the boom, which has been known to happen. A drawback is that in many cases the vang (kicker) needs to be disconnected first. Retrieving the vang and reconnecting it can be a hassle if conditions are nasty. To make the process easier Ton has attached a short piece of line from the boom to the vang to keep it handy and untangled. He uses a high quality snap shackle to reconnect the vang to the boom.

Fig. 8: A close-up look at *Swiebertje's* reefing hook. The boom's forward end fitting has axles for three sheaves. One sheave has been replaced with the reefing hook. The hook has been modified by twisting it in a vice to make it point outward for easier attachment of the sail.

Fig. 9: Close-up view of a bungee with balls quick tie. Both sides are identical. The length of the bungee (approx. 6" – 8") needs to be short enough to provide some tension when connected.

Dick Harrington's set-up: Less sophisticated but fully functional

The reefing set-up on *Blue Mist* is far less sophisticated than any of the above. Her boom is an older generation, 1970's circular type and care needs to be exercised when drilling holes in order not to weaken the boom. There are some short-comings which I will point out, but on the whole, this set-up has served me well.

Fig. 10: Critiquing *Blue Mist's* set-up. The Harkin size 01 cheek blocks for the reefing lines are slightly large and will occasionally snag the mainsheet. A smaller size block would work better and look nicer. Both of the reefing lines (1st reef, yellow--near side and 2nd reef, green--far side) could use additional fairleads to pick up some of the slack (of which there will always be a small amount). The shock cord with hooks sail gathering system (the line woven through the reefing grommets) has since been replaced with "bungee with balls" quick ties. The long loops of shock cord with the old system tended to catch on stuff within the cockpit when raising the sail.

Fig. 11: Blue Mist's critique continued. Both of the reefing line clam cleats (for the yellow and green lines) should be located closer to the mast to be more accessible. Note the adjustable Cunningham-reefing hook which is shown located in the Cunningham grommet *(see fig. 12).*

Fig. 12: This is another way to setup a reefing hook. Since it is adjustable it can be easily moved and hooked into the new tack grommet once the sail has been lowered. Sometimes this is quicker and easier to do than twisting the luff of the sail to get it onto a fixed hook.

Fig. 13: Make your own quick ties. Materials: a) (1) bag of 1" diameter brightly colored wooden beads from a local craft store. b) Approximately 36" (each) of 3/16" shockcord. The length of the bungee (per side) should be 6" – 8". Since the paint on the balls may bleed, it is suggested that the balls be lightly sanded (mount on a ¼" bolt chucked in an electric drill), then coated with epoxy or varnish. (Al's note: A cheap(er?) plastic, less labour-intensive alternative to the beads is available from RWO (http://rwo-marine.com/): the mid-sized rope stopper balls *(image below)* in various colours R1991 through R1998.)